

**ADMIN GUIDE**

**BUSINESS SERIES**

# 48-port 10/100/1000 Ethernet Switch

Model: **SGE2010/SGE2010P**

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# Introduction

## Welcome

Thank you for choosing a Linksys Switch. This Switch will allow you to quickly and economically expand your Linksys system.

This new Linksys rack mount Switch delivers non-blocking, wire speed switching for your network clients, plus multiple options for connecting to your network backbone. Forty eight ports wire up your workstations or connect to other Linksys switches or devices.

The Switch features monitoring and configuration via your web browser, making it easy to manage your Switch. Or if you prefer, you can use the console interface to configure the Switch.

Use the instructions in this guide to help you connect the switch, set it up, and configure it to bridge your different networks. These instructions should be all you need to get the most out of the Switch.

## What's in this User Guide?

This user guide covers the steps for setting up and using the Switch.

- [Chapter 2, "Getting to Know the SGE2010/SGE2010P"](#)  
This chapter describes the ports, LEDs, and other features on the front and back panels of the switch.
- [Chapter 3, "Connecting Devices to the SGE2010/SGE2010P"](#)  
This chapter explains how to physically connect your network devices to the switch.
- [Chapter 4, "Using the Console"](#)  
This chapter describes the use of the switch console, which allows you to perform basic configuration of the switch.
- [Chapter 5, "Web Utility Configuration "](#)  
This chapter provides an introduction to the features of the web-based configuration utility.
- [Appendix A, "Contacts"](#)
- [Appendix B, "Customer Site Survey"](#)
- [Appendix C, "Warranty Information"](#)
- [Appendix D, "Federal Communication Commission Interference Statement"](#)
- [Appendix E, "Specifications"](#)

## Getting to Know the SGE2010/SGE2010P

This chapter describes the ports, LEDs, and other features on the front and back panels of the switch.

The SGE2010 and SGE2010P are 48-port, layer-2 Ethernet switches that affordably expand the capability of the Linksys system. These two versions are functionally identical except the SGE2010P model offers Power-over-Ethernet (PoE) which can be used to supply power to various Linksys products over Ethernet cable.

### SGE2010/P Front Panel



Feature	Description
Reset	The Switch can be reset by inserting a pin or paper clip into the RESET opening. <b>CAUTION:</b> If the RESET switch is pressed for more than 10 seconds, the Switch will reset to its default settings. All customized user settings will be lost.
LEDs	The Switch uses Light Emitting Diodes (LEDs) to indicate the status of numerous functions. These functions are listed below.
PWR	A green PWR LED lights up to indicate that the Switch is powered on.
FAN	A green FAN LED lights up to indicate that the cooling fan is operating properly. A blinking red FAN LED indicates that the cooling fan has failed.
RPS	A green RPS LED lights up to indicate that RPS is connected and operating properly. A blinking red RPS LED indicates an RPS fault.
MST	A green MST LED indicates that this Switch is a stack master.
Stack ID	A green Stack ID LED indicates that this Switch is stacked and the corresponding number indicates its stack ID.
Act/Link	The green Act/Link LEDs light up to indicate a functional network link through the corresponding port with an attached device. The Act (Activity) LEDs flash to indicate that the Switch is actively sending or receiving data over that port.
Speed	On the SGE2010, a green Speed LED indicates that the port is linked to a 100Mbps device.
PoE	On the SGE2010P, a green PoE LED indicates that PoE is active on that port.

Feature	Description
1-48	<p>The Switch is equipped with 48 auto-sensing, Ethernet (802.3) network ports, which use RJ-45 connectors. The Fast Ethernet ports support network speeds of 10Mbps, 100Mbps, or 1000Mbps. They can operate in half and full-duplex modes. Auto-sensing technology enables each port to automatically detect the speed of the device connected to it, and adjust its speed and duplex accordingly.</p> <p>The switch can deliver a maximum of 15.4W to a PoE port. With regular AC power supply, there is 360W available to all PoE ports, and 280W available with redundant power supply.</p> <p>Ports 45, 46, 47 and 48 are shared with miniGBIC1, miniGBIC2, miniGBIC3, and miniGBIC4, respectively.</p> <p><b>NOTE:</b> A switch is in stacking mode by default. In stacking mode, ports 24 and 48 are reserved for use as stacking ports. For more information about stacking, refer to the <i>SFE2010/SGE2010 Reference Guide</i>.</p>
miniGBIC1-4	<p>The switch provides four mini-GBIC ports. The mini-GBIC (gigabit interface converter) port is a connection point for a mini-GBIC expansion module, so the Switch can be uplinked via fiber to another switch. Each mini-GBIC port provides a link to a high-speed network segment or individual workstation at speeds of up to 1000Mbps.</p> <p>Use the Linksys MGBT1, MGBSX1, or MGBLH1 mini-GBIC modules with the switch. The MGBSX1 and the MGBLH1 require fiber cabling with LC connectors, while the MGBT1 requires a Category 5e Ethernet cable with an RJ-45 connector.</p> <p><b>NOTE:</b> If shared ports are both connected, then the miniGBIC port has priority.</p>

## SGE2010/P Back Panel



Feature	Description
Power	The Power port is where you will connect the power cord.
Console	The Console port is where you can connect a serial cable to a PC's serial port for configuration using your PC's HyperTerminal program. Refer to Chapter 4: Using the Console Interface for Configuration for more information.
RPS	Redundant Power Supply (Linksys RPS1000)

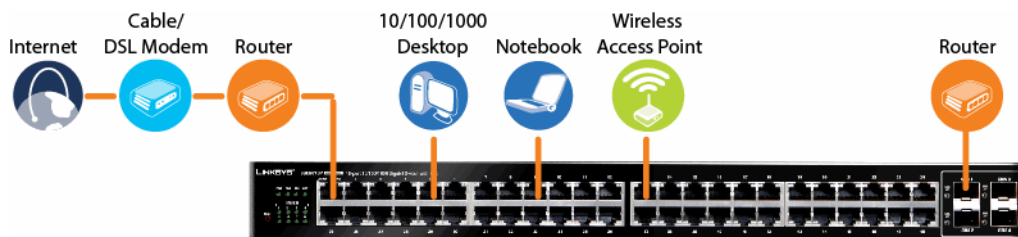
## Connecting Devices to the SGE2010/SGE2010P

This chapter explains how to physically connect your network devices to the switch.

- ["Sample Network Configuration," on page 4](#)
- ["Maximum Cabling Distances," on page 4](#)
- ["Before You Install the Switch..." on page 5](#)
- ["Placement Options," on page 5](#)
- ["Connecting the Cables," on page 7](#)

### Sample Network Configuration

For an example of a possible network configuration, see the application diagrams shown below.



### Maximum Cabling Distances

When you connect your network devices, make sure you don't exceed the maximum cabling distances, which are listed in the following table:

From	To	Maximum Distance
Switch	Switch or Hub*	100 meters (328 feet)
Hub	Hub	5 meters (16.4 feet)
Switch or Hub	Computer	100 meters (328 feet)

\*A hub refers to any type of 100Mbps hub, including regular hubs and stackable hubs. A 10Mbps hub connected to another 10Mbps hub can span up to 100 meters (328 feet).

## Before You Install the Switch...

When you choose a location for the switch, observe the following guidelines:

- Make sure that the switch will be accessible and that the cables can be easily connected.
- Keep cabling away from sources of electrical noise, power lines, and fluorescent lighting fixtures.
- Position the switch away from water and moisture sources.
- To ensure adequate air flow around the switch, be sure to provide a minimum clearance of two inches (50 mm).
- Connect the supplied power cord to the switch's power port, and plug the other end into an electrical outlet.

**CAUTION:** Make sure you use the power cord that is supplied with the switch. Use of a different power cord could damage the switch.

## Placement Options

Before connecting cables to the Ethernet switch, first you will physically install the Ethernet switch. Either set the Ethernet switch on its four rubber feet for desktop placement, mount it in a standard-sized, 19-inch wide for rack-mount placement, or mount it on a wall with the wall-mount brackets provided.

**NOTE:** The four supplied mounting brackets can be used for either wall mount or rack mount installations.

### Desktop Placement

1. Attach the rubber feet to the recessed areas on the bottom of the Ethernet switch.



2. Place the Ethernet switch on a desktop near an AC power source.



**CAUTION:** Keep enough ventilation space for the Ethernet switch so it does not exceed the environmental restrictions mentioned in the specifications.

### Rack-Mount Placement

To mount the Ethernet switch in any standard-sized, 19-inch wide, (each Ethernet switch requires 1RU of space in the rack), follow these instructions:



1. Remove the four front screws on one side of the Ethernet switch. Retain the screws for re-installation.
2. Place one of the supplied spacers on the side of the Ethernet switch so the four holes align to the screw holes.

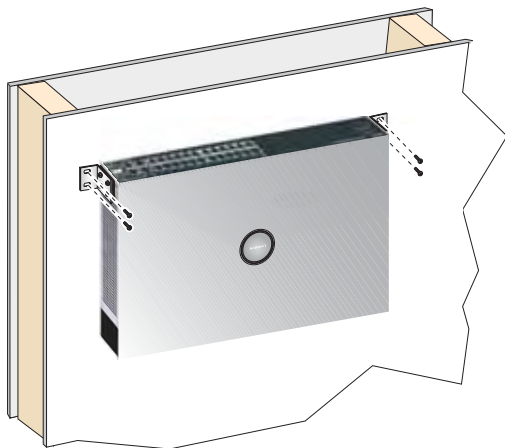


3. Place a rack mount bracket next to the spacer and reinstall the four screws (removed in step 1).
4. Repeat steps 2 through 3 for the other side of the Ethernet switch.
5. Attach the Ethernet switch to the rack using the supplied screws.



### Wall-Mount Placement

1. On one of the side corners, remove the four front screws on of the Ethernet switch. Retain the screws for re-installation.



**NOTE:** The Ethernet switch, shown below, is mounted with the ports located on top. When the switch is mounted to a wall, the ports can be oriented in any direction.

2. Place one of the supplied spacers on the side of the Ethernet switch so the four holes align to the screw holes.
3. Place a rack mount bracket next to the spacer and reinstall the four screws (removed in step 1). The wall mount brackets should point towards the bottom of the Ethernet switch.
4. Repeat steps 1 through 3 for the other corners of the Ethernet switch.
5. Attach the Ethernet switch to a wall with appropriate screws (not supplied).

**CAUTION:** Ensure that the Ethernet switch is securely attached to the wall.

### Connecting the Cables

To connect network devices to the Ethernet switch, follow these instructions:

1. For 10/100Mbps devices, connect a Category 5 Ethernet network cable to one of the numbered ports on the Ethernet switch. For a 1000Mbps device, connect a Category 5e Ethernet network cable to one of the uplink ports on the Ethernet switch.

**NOTE:** If connecting an Ethernet switch to an SVR3000 router, connect it to a Cascade port on the SVR3000.

2. Connect the other end to a PC or other network device.
3. Repeat steps 2 and 3 to connect additional devices.
4. If you are using the mini-GBIC port, then insert the mini-GBIC module to the mini-GBIC port. For detailed instructions, refer to the documentation supplied with the mini-GBIC module.

**CAUTION:** Observe the orientation of the mini-GBIC module before inserting it into a mini-GBIC port. The bottom mini-GBIC ports are upside down in relation to the top mini-GBIC ports.

5. If you use the console interface to configure the Ethernet switch, then connect the supplied serial cable to the console port (located on the back of the Ethernet switch), and tighten the captive retaining screws. Connect the other end to your PC's serial port. (The PC must be running VT100 terminal emulation software, such as HyperTerminal.)
6. Connect the supplied power cord to the power port, and plug the other end into an electrical outlet.

**CAUTION:** Make sure you use the power cord that is supplied with the Ethernet switch. Use of a different power cord could damage the Ethernet switch.

7. Power on the network devices connected to the Ethernet switch. Each active port's corresponding Act/Link LED will light up on the Ethernet switch. If a port has an active Gigabit connection, then its corresponding Gigabit LED will also light up.
8. Proceed as needed:
  - If you will use the console interface to configure the Ethernet switch, proceed to ["Console Configuration" section on page 33](#) for directions.
  - If you use the Web-based Utility to configure the Ethernet switch, proceed to ["Web Utility Configuration" section on page 50](#).

## Using the Console

This chapter describes the use of the switch console, which allows you to perform basic configuration of the switch.

The switch features a menu-driven console interface for basic configuration of the switch and management of your network. This chapter describes console interface configuration. Configuration can also be performed through the web utility, which is covered in the next chapter.

- ["Connecting to Your Switch with HyperTerminal," on page 9](#)
- ["Connecting to the Switch with Telnet," on page 12](#)
- [Logging On to the Console \(see page 12\)](#)
- [Selecting Menu Options and Actions \(see page 12\)](#)
- [Using the Switch Main Menu \(see page 13\)](#)
- [System Configuration \(see page 13\)](#)
- [Port Status \(see page 44\)](#)
- [Port Configuration \(see page 46\)](#)
- [System Mode \(Layer 2 / Layer 3\) Selection \(see page 48\)](#)
- [Help \(see page 49\)](#)
- [Logout \(see page 50\)](#)

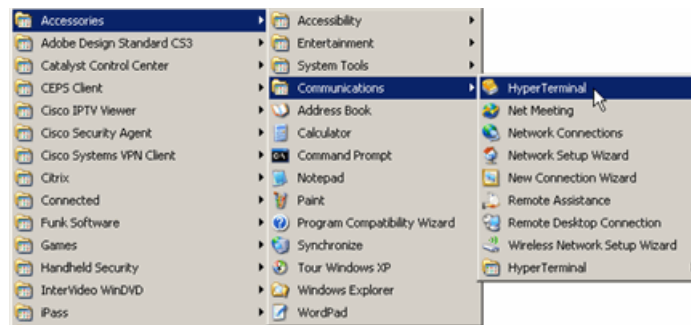
## Connecting to Your Switch with HyperTerminal

You can use the HyperTerminal to connect to your switch.

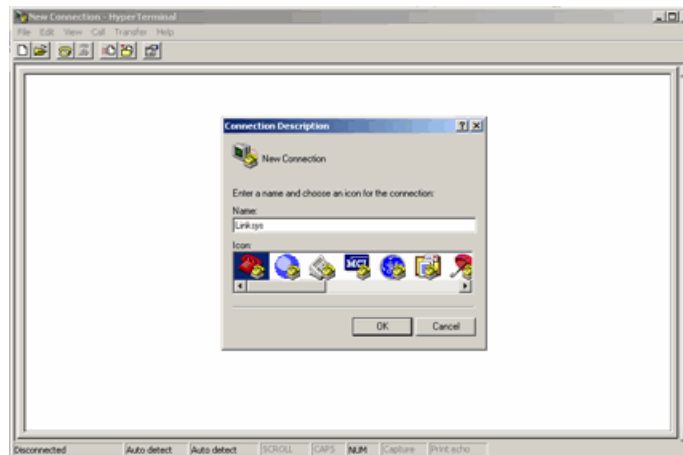
**NOTE:** The switch also can be configured through a telnet connection. Telnet to the switch IP address 192.168.1.254. Then, press the **Enter** key. The default logon ID is **admin** with a blank password.

Before you use HyperTerminal to connect to your switch for the first time, you must configure the application on your PC. You can save the settings to use each time you connect to your switch.

1. Click the **Start** button. Choose **Programs > Accessories > Communications > HyperTerminal**.



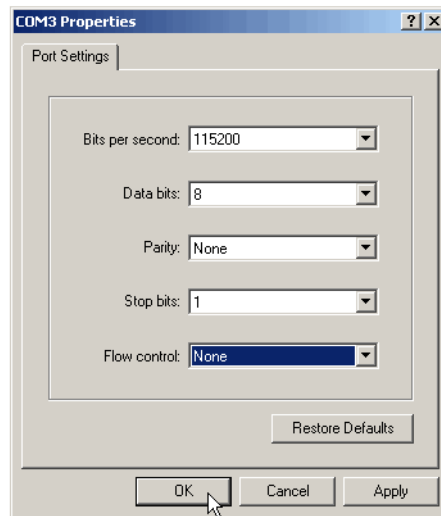
2. On the Connection Description screen, type a name for this connection, select an icon, and then click **OK**.



3. On the *Connect To* screen, use the *Connect using* drop-down list to select a port to communicate with the switch: COMn, or TCP/IP.



4. Set the serial port settings as follows:



- **Bits per second:** 115200
  - **Data bits:** 8
  - **Parity:** None
  - **Stop bits:** 1
  - **Flow control:** None
5. Then, click the **OK** button.



6. Optionally, on the **File** menu, click **Save** to save these settings. The next time that you need to connect to the console, you can open this saved connection.

## Connecting to the Switch with Telnet

You can connect to the switch with telnet.

1. Open a command line editor and enter **telnet** <switch ip address>. Then, press the **Enter** key.
2. When the *Login* screen appears, select **Edit** and enter **admin** in the *User Name* field. Leave the *Password* field blank.
3. Press the **Esc** key to return to the *Login* screen.
4. Select **Enter** to enter the CLI interface.

**NOTE:** The *Username & Password Settings* screen can also be used to set passwords for other users.

## Logging On to the Console

1. Start HyperTerminal and open the connection that you configured previously.
2. When the blinking cursor appears, press the **Enter** key.
3. When prompted to login, enter the default login and password: **admin**

The *Switch Main Menu* appears.

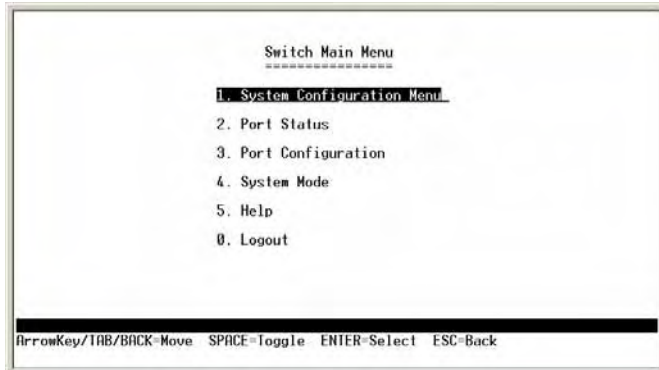
## Selecting Menu Options and Actions

Within the Console Interface, menus list options in numeric order. Actions appear at the end of the screen. To select menu options and actions, use the following keys on your keyboard:

Key	Function
Arrow keys	Move the cursor up, down, left, or right.
Number key	Press the menu number and then press Enter key to select a menu option.
Tab	Move the cursor from one field to the next on an editing screen.
Enter	Select an option that is highlighted by the cursor.
Esc	Return to the previous menu or screen, or move cursor from editable fields to <i>Action</i> list.

## Using the Switch Main Menu

The *Switch Main Menu* provides access to screens that you can use to configure your system, view or modify port and PoE settings, and view or modify system and stacking mode.



1. [System Configuration \(see page 13\)](#)
2. [Port Status \(see page 44\)](#)
3. [Port Configuration \(see page 46\)](#)
4. [System Mode \(Layer 2 / Layer 3\) Selection \(see page 48\)](#)
5. [Help \(see page 49\)](#)
0. [Logout \(see page 50\)](#)

## System Configuration

The *System Configuration Menu* provides access to screens where you can manage system information, view or modify management settings, set up user accounts, and manage security settings. It also provides access to screens where you can manage VLAN IDs, IPv4 and IPv6 settings, and download upgrade files. You also will use this menu if you need to restore default settings, reset the switch to the factory default configuration, or reboot the system.



1. [System Information \(see page 14\)](#)
2. [Management Settings \(see page 16\)](#)



3. [Username & Password Settings \(see page 21\)](#)
4. [Security Settings \(see page 22\)](#)
5. [VLAN Management \(see page 25\)](#)
6. [IP Configuration \(see page 26\)](#)
7. [File Management \(see page 40\)](#)
8. [Restore System Default Settings \(see page 43\)](#)
9. [Reset to Factory Settings \(see page 43\)](#)
10. [Reboot System \(see page 43\)](#)
11. [Stack Configuration \(see page 44\)](#)

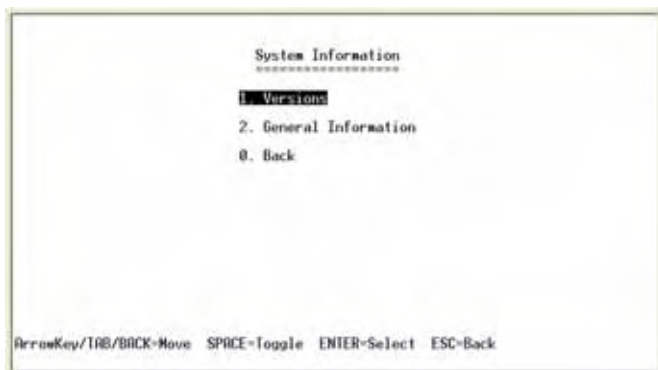
0.Back (Select return to the previous menu.)

#### **To open this screen:**

From the *Switch Main Menu*, select **1. System Configuration Menu**.

### **System Information**

The *System Information* menu provides access to screens where you can view firmware version information and general system information.



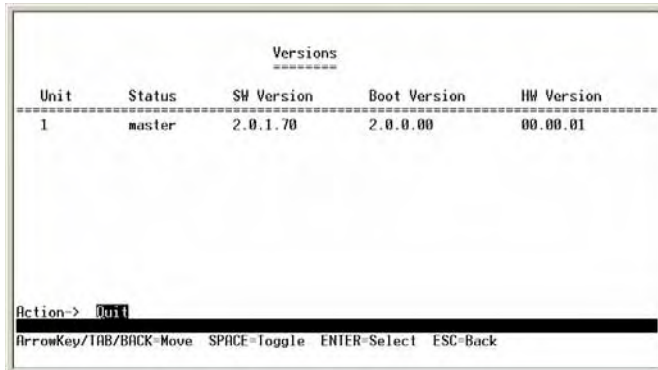
1. [Versions \(see page 15\)](#)
  2. [General Information \(see page 15\)](#)
- 0.Back (Select to return to the previous menu.)

#### **To open this menu:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **1. System Information**.
3. When you are finished using this screen, select **0. Back**.

### Versions

Use the Versions screen to display the boot, software, and hardware firmware versions of the Ethernet switch. In stacking mode, this information is displayed for the stack master.



Unit	Status	SW Version	Boot Version	HW Version
1	master	2.0.1.70	2.0.0.00	00.00.01

Action-> Unit

ArrowKey/TAB/BACK=Move SPACE=Toggle ENTER=Select ESC=Back

#### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **1. System Information**.
3. From the *System Information Menu*, select **1. Versions**.

### General Information

Use the *General System Information* screen to view the system description, system up time, and system MAC address. You also can enter a system contact, system name, and system location.



General System Information

System Description: 24-port 10/100 Ethernet Switch with PoE

System Up Time: 0:00:20:47 (days:hour:min:sec)

System MAC Address: 00:00:00:00:00:00

System Contact:

System Name:

System Location:

Action-> Unit Edit Save

ArrowKey/TAB/BACK=Move SPACE=Toggle ENTER=Select ESC=Back

#### To open this screen:

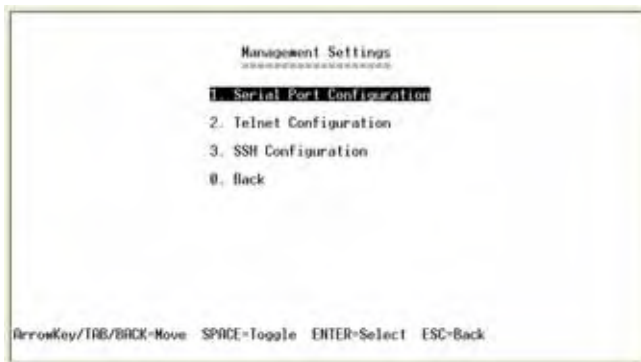
1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **1. System Information**.
3. From the *System Information Menu*, select **2. General System Information**.

#### **To change the system contact, system name, and location:**

1. Select **Edit**, and then make your changes. Press the **Tab** key to move the cursor from one field to the next.
2. Press the **Esc** key to return to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## Management Settings

The *Management Settings* screen provides access to screens where you can change the settings for serial port, telnet, and secure telnet (SSH).



1. [Serial Port Configuration \(see page 17\)](#)
  2. [Telnet Configuration \(see page 17\)](#)
  3. [SSH Configuration \(see page 18\)](#)
- 0.Back (Select to return to the previous menu.)

#### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration Menu**.
2. From the *System Configuration Menu*, select **2. Management Settings**.

### Serial Port Configuration

Use the *Serial Port Configuration* screen to view or change the baud rate of the Ethernet switch.



#### **To open this screen:**

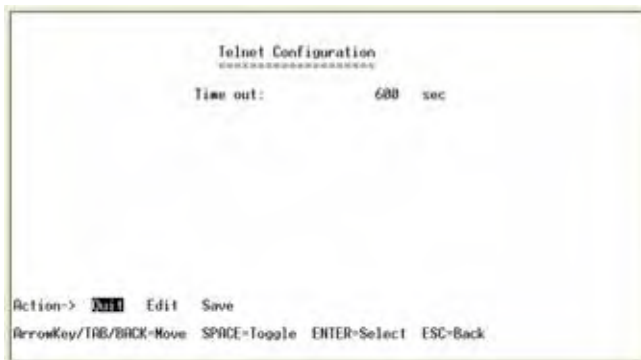
1. From the *Switch Main Menu*, select **1. System Configuration Menu**.
2. From the *System Configuration Menu*, select **2. Management Settings**.
3. From the *Management Settings Menu*, choose **1. Serial Port Configuration**.

#### **To change the baud rate of the serial port:**

1. Select **Edit**, and then make changes.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### Telnet Configuration

Use the *Telnet Configuration* screen to view or change the time-out settings.



### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration Menu**.
2. From the *System Configuration Menu*, select **2. Management Settings**.
3. From the *Management Settings Menu*, choose **2. Telnet Configuration**.

### **To change the time-out setting:**

1. Select **Edit**, and then make your changes.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## **SSH Configuration**

The *SSH Configuration* menu provides access to screens where you can configure SSH server settings, generate crypto keys, and generate keys fingerprints.



1. [SSH Server Configuration \(see page 19\)](#)
  2. [SSH Status \(see page 19\)](#)
  3. [SSH Crypto Key Generation \(see page 20\)](#)
  4. [SSH Keys Fingerprints \(see page 21\)](#)
- 0.Back (Select to return to the previous menu.)

### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration Menu**.
2. From the *System Configuration Menu*, select **2. Management Settings**.
3. From the *Management Settings Menu*, choose **3. SSH Configuration**.

### SSH Server Configuration

Use the *SSH Server Configuration* screen to view or edit the status of the SSH server. You can enable or disable the server and configure the SSH server port



#### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration Menu**.
2. From the *System Configuration Menu*, select **2. Management Settings**.
3. From the *Management Settings Menu*, choose **3. SSH Configuration**.
4. From the *SSH Configuration Menu*, select **1. SSH Server Configuration**.

#### To change SSH Server settings:

1. Select **Edit**, and then make your changes.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### SSH Status

Use the SSH Status screen to view information about SSH sessions.



#### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration Menu**.
2. From the *System Configuration Menu*, select **2. Management Settings**.
3. From the *Management Settings Menu*, choose **3. SSH Configuration**.
4. From the *SSH Configuration Menu*, select **2. SSH Status**.
5. When you finish using this screen, select **Quit**.

#### **SSH Crypto Key Generation**

Use the SSH Crypto Key Generation screen to generate an SSH RSA or DSA key.



#### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration Menu**.
2. From the *System Configuration Menu*, select **2. Management Settings**.
3. From the *Management Settings Menu*, choose **3. SSH Configuration**.
4. From the *SSH Configuration Menu*, select **3. SSH Crypto Key Generation**.
5. When you finish using this screen, select **Quit**.

#### **To change SSH Crypto Key Generation settings:**

**NOTE:** Only the public key algorithm can be changed.

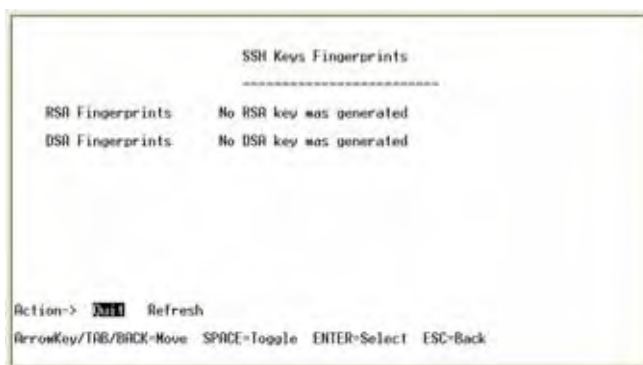
1. Select **Edit**, and then make your changes.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### To generate the crypto key:

1. Verify that the information is correct.
2. Select **Execute**.
3. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### SSH Keys Fingerprints

Use the *SSH Keys Fingerprints* screen to view the RSA and DSA fingerprints.

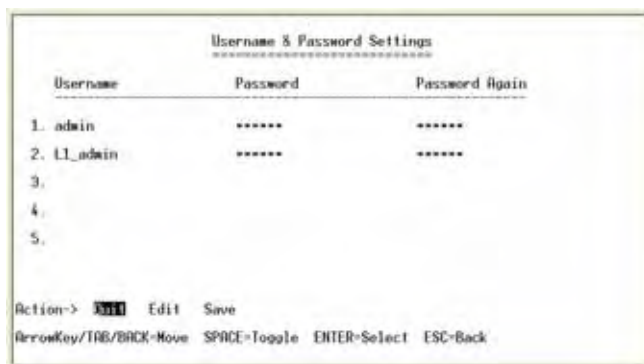


### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration Menu**.
2. From the *System Configuration Menu*, select **2. Management Settings**.
3. From the *Management Settings Menu*, choose **3. SSH Configuration**.
4. From the *SSH Configuration Menu*, select **4. SSH Keys Fingerprints**.
5. When you finish using this screen, select **Quit**.

### Username & Password Settings

You can use the *Username & Password Settings* screen to view, add, or modify the user accounts for the switch. Up to five users can be assigned.





**NOTE:** The default user is “admin” with no password.

**To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **3. Username & Password Settings**.

**To change User & Password settings:**

1. Select **Edit**, and then make your changes. Press the **Tab** key to move from one field to the next.

**NOTE:** The username and password can be 20 characters in length. You must enter the same password in the *Password* field and the *Password Again* field.

2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## Security Settings

The *Security Settings* screen provides access to screens where you can generate SSL certificates and view the SSL certificate listings. You also can use this module to disable the active management access profile.



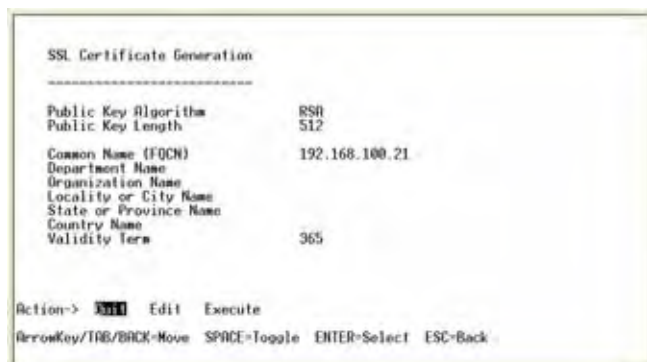
1. [SSL Generate Certificate \(see page 23\)](#)
  2. [Show Certificate \(see page 24\)](#)
  3. [Disable Active Management Access Profile \(see page 24\)](#)
- 0.Back (Select to return to the previous menu.)

**To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **4. Security Settings**.

### SSL Generate Certificate

Use the *SSL Certificate Generation* screen to view, edit, and execute device-generated certificates.



#### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration* menu, select **4. Security Settings**.
3. From the *Security Settings Menu*, select **1. SSL Generate Certificate**.

#### To edit and execute a certificate:

1. Select **Edit**, and then make your changes. Press the **Tab** key to move the cursor from field to field.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Execute** to generate the certificate with the new parameters.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

The following fields are specified:

Public Key Algorithm	Specifies the SSL type
Public Key Length	Specifies the SSL RSA key length. (Range: 512 to 2048)
Common Name (FQCN)	IP address of the Ethernet switch
Department Name	Specifies the department name. (Range: 1 to 32 characters)
Organization Name	Specifies the organization name. (Range: 1 to 32 characters)
Locality or City Name	Specifies the location or city name. (Range: 1 to 32 characters)
State or Province Name	Specifies the state or province name. (Range: 1 to 32 characters)

Country Name	Specifies the country name. (Range: 2 to 2)
Validity Term	Specifies number of days certification is valid. (Range: 30 to 3650)

### Show Certificate

Use the *Show Certificate* screen to display the internal certificate.



#### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **4. Security Settings**.
3. From the *Security Settings Menu*, select **2. SSL Show Certificate**.
4. When you finish using this screen, select **Quit**.

### Disable Active Management Access Profile

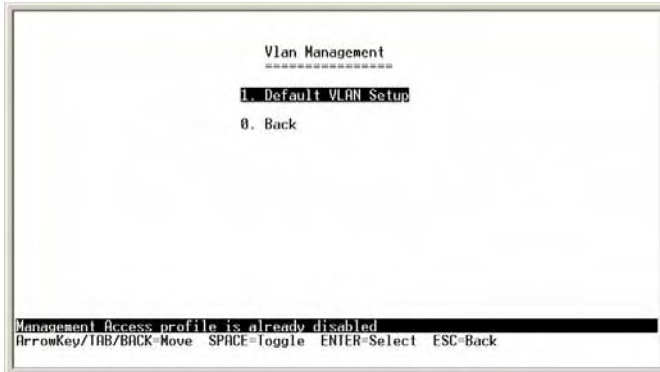
You can use select option 3 on the Security Settings menu to disable the active management access profile.

#### To disable the active management access profile:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration* menu, select **4. Security Settings**.
3. From the *Security Settings Menu*, select **3. Disable Active Management Access Profile**.
4. When the confirmation message appears, press **Y** to confirm, or press **N** to cancel.

## VLAN Management

The *VLAN Management* menu provides access to a screen where you can view or modify the default VLAN ID.



1. [Default VLAN Setup \(see page 25\)](#)

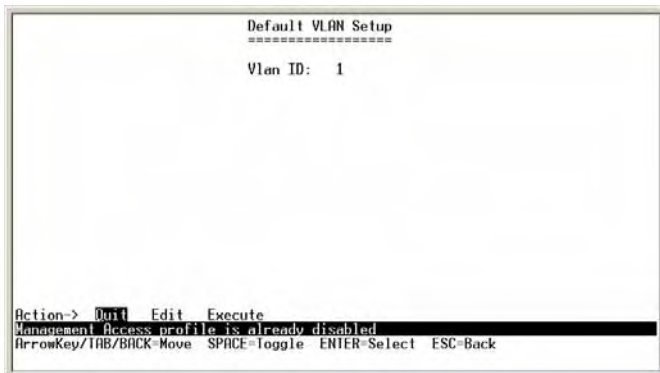
0.Back (Select to return to the previous menu.)

### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **5. Vlan Management**.

## Default VLAN Setup

You can use the *Default VLAN Setup* screen to view and change the VLAN ID.



### To open this screen:

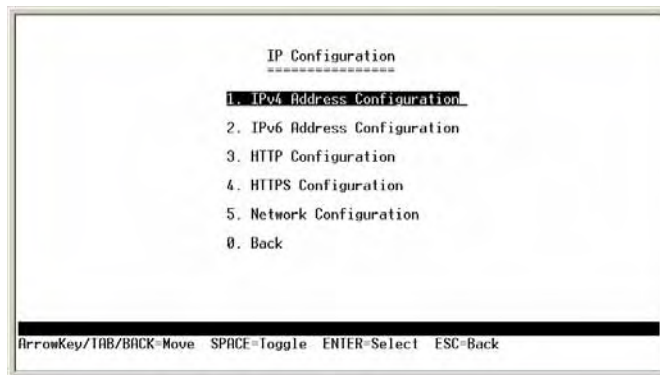
1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **5. Vlan Management**.
3. From the *VLAN Management* menu, press **1. Default VLAN Setup**.

#### **To edit the VLAN ID:**

1. Select **Edit**.
2. Type the VLAN ID.
3. Press the **Esc** key to move the cursor to the *Action* list.
4. Select **Execute**.
5. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## IP Configuration

The *IP Configuration* menu provides access to screens where you can manage IPv4 and IPv6 address configuration, HTTP and HTTPS configuration, and network configuration.



1. [IPv4 Address Configuration \(see page 27\)](#)
  2. [IPv6 Address Configuration \(see page 28\)](#)
  3. [HTTP Configuration \(see page 34\)](#)
  4. [HTTPS Configuration \(see page 34\)](#)
  5. [Network Configuration \(see page 35\)](#)
- 0.Back (Select to return to the previous menu.)

#### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.

### IPv4 Address Configuration

The *IPv4 Configuration* menu provides access to the IPv4 address settings and DHCP renew.



1. [IPv4 Address Settings \(see page 27\)](#)

2. [DHCP Renew \(see page 28\)](#)

0.Back (Select to return to the previous menu.)

#### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **1. IPv4 Address Configuration**.

### IPv4 Address Settings

You can use this screen to view or editing the IPv4 address settings.



#### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **1. IPv4 Address Configuration**.

4. From the *IPv4 Address Configuration* menu, select **1. IPv4 Address Settings**.

#### **To edit the IPv4 address settings:**

1. Select **Edit.**, and then make the changes. Press the **Tab** key to move the cursor from one field to the next.

**NOTE:** To enable or disable the DHCP client, move the cursor to the field, and then press the **Space Bar** to toggle between ENABLE and DISABLE.

2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your settings
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

#### **DHCP Renew**

You can select this option to renew DHCP.

**NOTE:** This option is available only if the interface is configured as a DHCP interface, through IPv4 Address Settings.

#### **To renew DHCP:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **1. IPv4 Address Configuration**.
4. From the *IPv4 Address Configuration* menu, select **2. DHCP Renew**. The *Operation Complete* message appears.

#### **IPv6 Address Configuration**

The *IPv6 Configuration* menu provides access to screens where you can manage the settings for IPv6 and ISATAP.



1. [IPv6 Interface Enable](#) (see page 29)
2. [IPv6 Address Settings](#) (see page 30)
3. [IPv6 Address Table](#) (see page 31)
4. [IPv6 ISATAP Enable](#) (see page 31)
5. [IPv6 ISATAP Interface Show](#) (see page 32)
6. [IPv6 Default Gateway](#) (see page 33)

#### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **2. IPv6 Address Configuration**.

#### **IPv6 Interface Enable**

You can use the *IPv6 Interface Enable* screen to enable or disable the IPv6 interface.



#### **To open this screen:**

1. On the *Switch Main Menu*, select **6. IP Configuration**.
2. On the *IP Configuration* menu, select **2. IPv6 Address Configuration**.
3. On the *IPv6 Address Configuration* menu, select **1. IPv6 Interface Enable**.

#### **To edit the IPv6 interface settings:**

1. When you finish using this Select **Edit**., and then make the changes. Press the **Tab** key to move the cursor from one field to the next.

**NOTE:** To enable or disable the interface, move the cursor to the field, and then press the **Space Bar** to toggle between ENABLE and DISABLE. If you select ENABLE, a warning appears. Press the **Enter** key to acknowledge the warning.

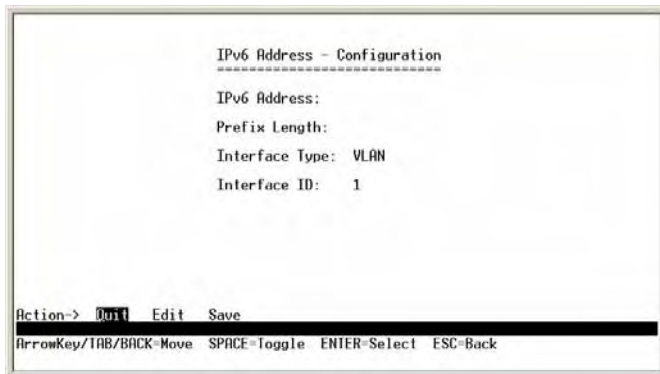
2. Press the **Esc** key to move the cursor to the *Action* list.



3. Select **Save** to save your settings
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.
5. When you are finished working on this screen, select **Quit**.

### IPv6 Address Settings

You can use the *IPv6 Address - Configuration* screen to edit the IPv6 address settings.



#### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **2. IPv6 Address Configuration**.
4. From the *IPv6 Address Configuration* menu, select **2. IPv6 Address Settings**.

#### To edit the IPv6 address settings:

1. Select **Edit**, and then make the changes. Press the **Tab** key to move the cursor from one field to the next.  
  
**NOTE:** To enable or disable the DHCP client, move the cursor to the field, and then press the **Space Bar** to toggle between ENABLE and DISABLE.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your settings
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## IPv6 Address Table

The IPv6 Address Table lists the IPv6 addresses that are configured.

```

IPv6 Address Table
=====
Interface   IPv6 Type   IPv6 Address
-----

```

**To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **2. IPv6 Address Configuration**.
4. From the *IPv6 Address Configuration* menu, select **3. IPv6 Address Table**.

## IPv6 ISATAP Enable

You can use the *IPv6 ISATAP Enable* screen to configure the ISATAP tunnel.

```
ISATAP Tunnel
=====
Status:                               DISABLE
Tunnel Router's Domain Name:         ISATAP
Query Interval:                       10
ISATAP Solicitation Interval:         10
ISATAP Robustness:                    3

Action-> Quit Edit Save
ArrowKey/TAB/BACK=Move SPACE=toggle ENTER=Select ESC=Back
```

**To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **2. IPv6 Address Configuration**.
4. From the *IPv6 Address Configuration* menu, select **4. IPv6 ISATAP Enable**.

#### To edit the ISATAP tunnel settings

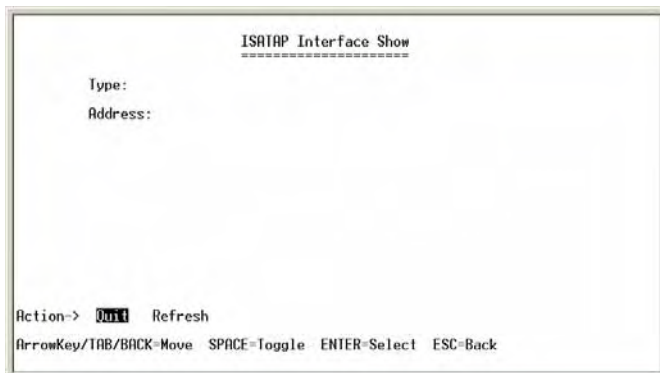
1. Select **Edit**., and then make the changes. Press the **Tab** key to move the cursor from one field to the next.

**NOTE:** To enable or disable the ISATAP tunnel, move the cursor to the *Status* field, and then press the **Space Bar** to toggle between ENABLE and DISABLE.

2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your settings
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

#### IPv6 ISATAP Interface Show

You can use the **ISATAP Interface Show** screen to view the interface type and address.



#### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **2. IPv6 Address Configuration**.
4. From the *IPv6 Address Configuration* menu, select **5. ISATAP Interface Show**.

### IPv6 Default Gateway

You can use the *IPv6 Default Gateway* screen to view or edit information about the IPv6 Default Gateway.

```

                                IPv6 Default Gateway
                                =====
Default Gateway IPv6 Address:

Interface Type:                VLAN
Interface ID:                  1
State:

Action-> Quit Edit Execute
ArrowKey/TAB/BACK-Move SPACE=Toggle ENTER=Select ESC=Back

```

#### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **2. IPv6 Address Configuration**.
4. From the *IPv6 Address Configuration* menu, select **6. IPv6 Default Gateway**.

#### **To edit the IPv6 default gateway settings:**

1. Select **Edit**, and then make the changes. Press the **Tab** key to move the cursor from one field to the next.  
  
**NOTE:** To change the state of the gateway, move the cursor to the *State* field, and then press the **Space Bar** to toggle between ENABLE and DISABLE.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Execute** to save your settings
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### HTTP Configuration

You can use the *HTTP* screen to view and edit the HTTP settings. You can enable or disable the HTTP server and configure the port on which the session is enabled.



#### To open the screen:

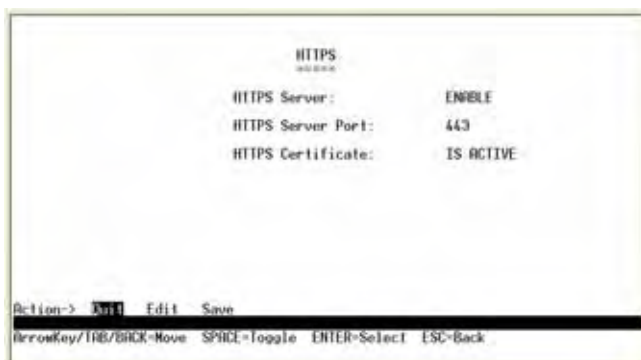
1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **3. HTTP Configuration**.

#### To change the HTTP settings:

1. Select **Edit**, and then make your changes.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### HTTPS Configuration

Use the HTTPS Configuration screen to configure HTTPS settings. You can enable or disable the HTTPS server and configure the port on which the session is enabled.



### **To open the screen:**

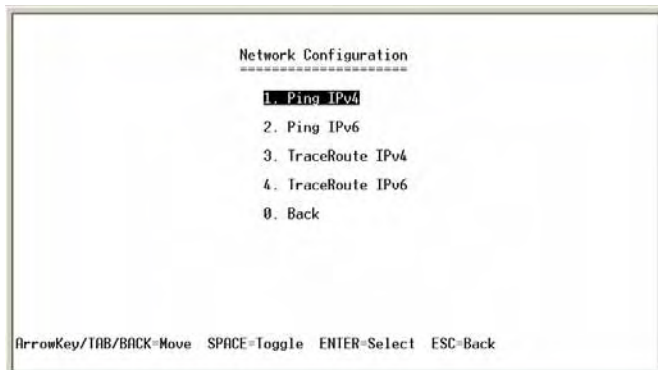
1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **4. HTTPS Configuration**.

### **To change HTTPS settings:**

1. Select **Edit**, and then make your changes.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## **Network Configuration**

The Network Configuration screen provides access to screens where you can execute ping tests and traceroute tests for IPv4 and IPv6 addresses.



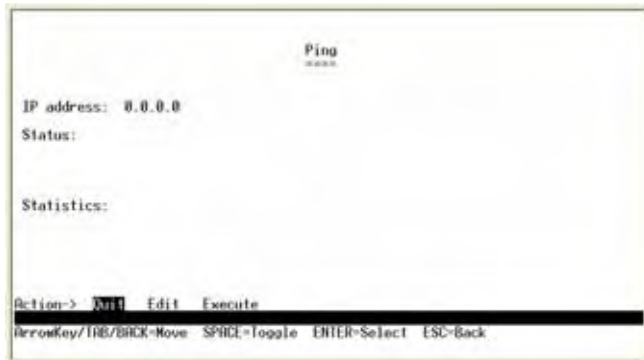
1. [Ping IPv4 \(see page 36\)](#)
  2. [Ping IPv6 \(see page 37\)](#)
  3. [TraceRoute IPv4 \(see page 38\)](#)
  4. [TraceRoute IPv6 \(see page 39\)](#)
- 0.Back (Select to return to the previous menu.)

### **To open the screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **5. Network Configuration**.

#### Ping IPv4

You can use the *Ping IPv4* screen to ping an IPv4 address.



#### To open the screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **5. Network Configuration**.
4. From the *Network Configuration* menu, select **1. IPv4 Ping**.

#### To change the IP address:

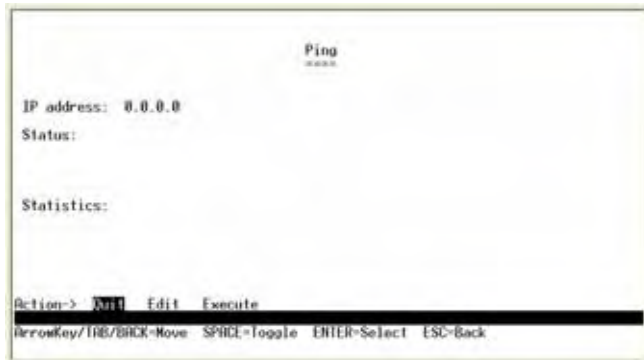
1. Select **Edit**, and then enter the IP address.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

#### To begin the ping test:

1. Select **Execute** to begin the ping test.
2. After the ping test is complete, the results of the test appear on the screen.
3. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### Ping IPv6

You can use the *Ping IPv6* screen to ping an IPv6 address.



#### To open the screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **5. Network Configuration**.
4. From the *Network Configuration* menu, select **2. IPv6 Ping**.

#### To change the IP address:

1. Select **Edit**, and then enter the IPv6 address.
2. Press the **Esc** key to move the cursor to the *Action* list.
3. Select **Save** to save your changes.
4. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

#### To begin the ping test:

1. Select **Execute** to begin the ping test.
2. After the ping test is complete, the results of the test appear on the screen.
3. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.



#### TraceRoute IPv4

You can use the *TraceRoute IPv4* screen to run a trace route test for an IPv4 address



#### To open the screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **5. Network Configuration**.
4. From the *Network Configuration* menu, select **3. Trace Router IPv4**.

#### To change the IP address:

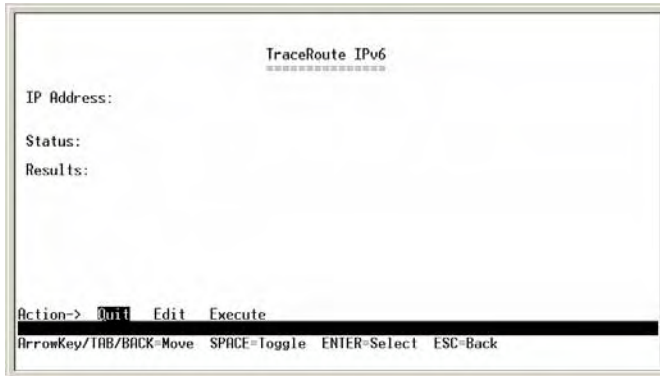
1. Select **Edit**, and then enter the IPv4 address.
2. Press the **Esc** key to move the cursor to the *Action* list.

#### To begin the trace route test:

1. Select **Execute** to begin the test.
2. After the test is complete, the results of the test appear on the screen.
3. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### TraceRoute IPv6

You can use the *TraceRoute IPv6* screen to run a trace route test for an IPv6 address.



TraceRoute IPv6

IP Address:

Status:

Results:

Action-> Quit Edit Execute

ArrowKey/TAB/BACK=Move SPACE=Toggle ENTER=Select ESC=Back

#### To open the screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **6. IP Configuration**.
3. From the *IP Configuration* menu, select **5. Network Configuration**.
4. From the *Network Configuration* menu, select **4. Trace Router IPv6**.

#### To change the IP address:

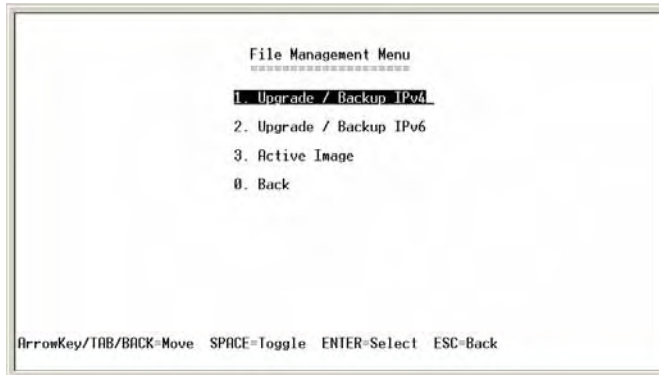
1. Select **Edit**, and then enter the IPv6 address.
2. Press the **Esc** key to move the cursor to the *Action* list.

#### To begin the trace route test:

1. Select **Execute** to begin the test.
2. After the test is complete, the results of the test appear on the screen.
3. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## File Management

The *File Management Menu* provides access to screens where you can download upgrade files from an IPv4 or IPv6 address.



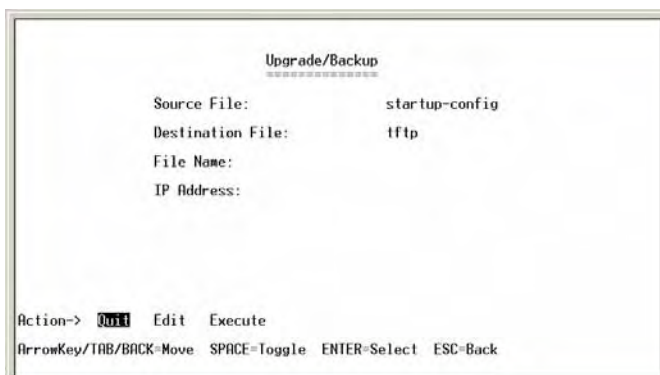
1. [Upgrade / Backup IPv4 \(see page 40\)](#)
  2. [Upgrade / Backup IPv6 \(see page 41\)](#)
  3. [Active Image \(see page 42\)](#)
- 0.Back (Select to return to the previous menu.)

### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **7. File Management**.

## Upgrade / Backup IPv4

You can use the *Upgrade/Backup IPv4* screen to download files from an IPv4 address.



### To open this screen:

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **7. File Management**.
3. From the *File Management Menu*, select **1. IPv4 Upgrade/Backup**.

#### **To enter the IPv4 Upgrade/Backup file name and location:**

1. Select **Edit**, and then make the changes. Press the **Tab** key to move the cursor from one field to the next.

**NOTE:** Specify the source and destination of the file, the file name, and the IPv4 address of the file server where the upgrade file is stored,

2. Press the **Esc** key to move the cursor to the *Action* list.

#### **To download a file from the specified location:**

3. Verify that the file name and location are correct.
4. Select **Execute**.
5. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### **Upgrade / Backup IPv6**

You can use the *Upgrade/Backup IPv6* screen to download files from an IPv6 address.

```
Upgrade/Backup
-----
Source File:      startup-config
Destination File:  tftp
File Name:
IP Address:
Interface Type:   VLAN
Interface ID:     1

Action->  Edit  Execute
ArrowKey/TAB/BACK=Move  SPACE=Toggle  ENTER=Select  ESC=Back
```

#### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **7. File Management**.
3. From the *File Management Menu*, select **2. IPv6 Upgrade/Backup**.

#### **To enter the IPv6 Upgrade/Backup file name and location:**

1. Select **Edit**, and then make the changes. Press the **Tab** key to move the cursor from one field to the next.

**NOTE:** Specify the source and destination of the file, the file name, and the IPv6 address of the file server where the upgrade file is stored. For an IPv6 address, you also must specify the interface type and ID.

2. Press the **Esc** key to move the cursor to the *Action* list.

### **To download a file from the specified location:**

3. Verify that the file name and location are correct.
4. Select **Execute**.
5. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

### **Active Image**

There are two software images on the Ethernet switch: Image 1 and Image 2. When you copy an image to the switch via TFTP, the inactive image is replaced. When you copy an image to the switch via the console port, the active image is replaced. You can use the *Active Image* screen to specify which image is the active image on the switch.



### **To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **7. File Management**.
3. From the *File Management Menu*, select **3. Active Image**.

### **To enter the active image settings**

1. Select **Edit**. The cursor moves to the *Active Image after Reset* field.
2. Press the **Space Bar** to change the image setting.
3. When the correct image setting appears in the field, press the **Esc** key to move the cursor to the *Action* list.
4. Select **Execute** to save your settings. The selected image will be active after reset.
5. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## Restore System Default Settings

You can restore the switch to the system default settings.

### *To restore system default settings*

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **8. Restore System Default Settings**.
3. When the confirmation message appears, press **y** to restore the default settings, or press **n** to cancel.

**NOTE:** Restoring default settings from the console or web resets all values except stacking configuration (stacking mode, stacking ports, and auto-numbering settings are not reset). To reset stacking configuration, use the hardware reset button on the front of the Ethernet switch.

## Reset to Factory Settings

You can restore the switch to the factory default settings.

### *To restore factory default settings*

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **9. Restore Factory Settings**.
3. When the confirmation message appears, press **y** to restore the default settings, or press **n** to cancel.

**NOTE:** Restoring factory settings from the console or web resets all values except stacking configuration (stacking mode, stacking ports, and auto-numbering settings *are not* reset). To reset stacking configuration, use the hardware reset button on the front of the Ethernet switch.

## Reboot System

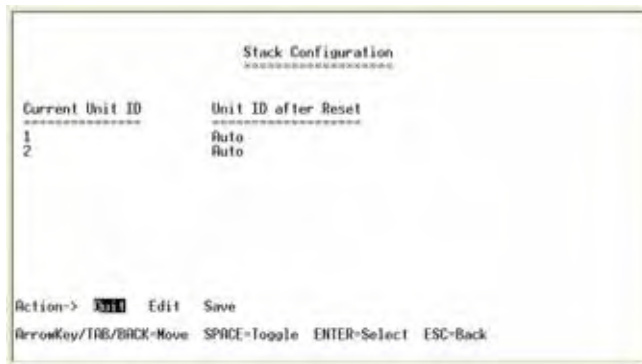
You can restart the Ethernet switch.

### *To restore system default settings*

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **10. Reboot System**.
3. When the confirmation message appears, press **y** to restore the default settings, or press **n** to cancel.

### Stack Configuration

You can use the *Stack Configuration* screen to specify the Stack ID for the Ethernet switch. By default, ID numbers are automatically assigned to each device.

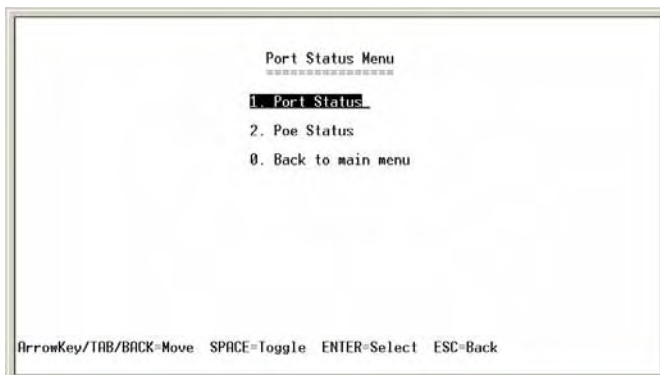


**To open this screen:**

1. From the *Switch Main Menu*, select **1. System Configuration**.
2. From the *System Configuration Menu*, select **11. Stack Configuration**.

### Port Status

The *Port Status* menu provides access to screens where you can view the port status and the PoE status for each port on the switch.



1. [Port Status \(see page 45\)](#)
2. [PoE Status \(see page 45\)](#)
- 0.Back (Select to return to the previous screen.)

**To open this screen:**

From the *Switch Main Menu*, press **2. Port Status**.

### Port Status

You can use the *Port Status* screen to view the port connection status. You can use the **up** or **down** arrow keys to scroll through all the ports on the switch.

Port Status				
Port	Enable	Link	Spd/Dpx	Flow Ctrl
1/g1	ENABLE	DOWN	-----	-----
1/g2	ENABLE	DOWN	-----	-----
1/g3	ENABLE	DOWN	-----	-----
1/g4	ENABLE	DOWN	-----	-----
1/g5	ENABLE	DOWN	-----	-----
1/g6	ENABLE	DOWN	-----	-----
1/g7	ENABLE	DOWN	-----	-----
1/g8	ENABLE	DOWN	-----	-----
1/g9	ENABLE	DOWN	-----	-----
1/g10	ENABLE	DOWN	-----	-----
1/g11	ENABLE	DOWN	-----	-----
1/g12	ENABLE	DOWN	-----	-----

Action-> **Quit** Refresh

ArrowKey/TAB/BACK=Move SPACE=Toggle ENTER=Select ESC=Back

**NOTE:** To configure ports, use the *Port Configuration* screen. See ["Port Settings," on page 46.](#)

#### To open this screen:

1. From the *Switch Main Menu*, press **2. Port Status**.
2. From the *Port Status Menu*, press **1. Port Status**.

### PoE Status

You can use the PoE Status screen to view the PoE status of the ports.

PoE Status			
Port	Status	Power Allocation	Power Consumption
1/g1	ENABLE	15.4 W	0 mW
1/g2	ENABLE	15.4 W	0 mW
1/g3	ENABLE	15.4 W	0 mW
1/g4	ENABLE	15.4 W	0 mW
1/g5	ENABLE	15.4 W	0 mW
1/g6	ENABLE	15.4 W	0 mW
1/g7	ENABLE	15.4 W	0 mW
1/g8	ENABLE	15.4 W	0 mW
1/g9	ENABLE	15.4 W	0 mW
1/g10	ENABLE	15.4 W	0 mW
1/g11	ENABLE	15.4 W	0 mW
1/g12	ENABLE	15.4 W	0 mW

Action-> **Quit** Refresh

ArrowKey/TAB/BACK=Move SPACE=Toggle ENTER=Select ESC=Back

**NOTE:** To configure PoE, use the *PoE Configuration* screen. See ["PoE Settings," on page 47.](#)

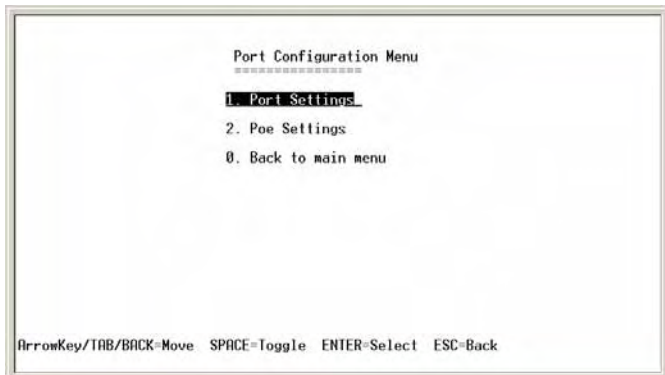
#### To open this screen:

1. From the *Switch Main Menu*, press **2. Port Status**.
2. From the *Port Status Menu*, press **2. Poe Status**.



## Port Configuration

The *Port Configuration Menu* provides access to screens where you can view or modify port settings and PoE settings.



1. [Port Settings \(see page 46\)](#)

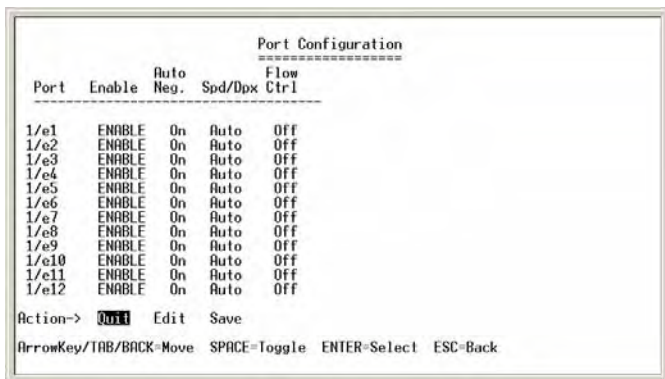
2. [PoE Settings \(see page 47\)](#)

0.Back (Select to return to the previous screen.)

From the *Switch Main Menu*, press **3. Port Configuration**.

## Port Settings

You can use the *Port Settings* screen to specify the auto negotiation status, port speed, duplex mode, and flow control settings. You can use the up or down arrow keys to scroll through all the ports on the Ethernet switch.



### To open this screen:

1. From the *Switch Main Menu*, press **3. Port Configuration**.

2. From the *Port Status Menu*, press **2. Poe Status**.

### To configure the ports:

1. Select **Edit**.
2. Proceed as needed:
  - a. Press the **down** arrow key to scroll down through the list of ports.
  - b. Press the **right arrow** key to move the cursor from one field to the next within a row.
  - c. To change a setting, move the cursor to the field, and then press the **Space Bar** until the desired setting appears.

Field	Settings
Enable	Enable or Disable
Auto Neg.	On or Off
Spd/Dpx	Auto, 10H, 100H, 10F, 100F, 1000F
Flow Ctrl	Auto, On or Off

3. Press the **Esc** key to move the cursor to the *Action* list.
4. Select **Save** to save your settings
5. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## PoE Settings

You can use the *PoE Settings* screen to specify the priority and PoE settings for each port. You can use the up or down arrow keys to scroll through all the ports on the Ethernet switch.

PoE Settings		
Port	Priority	PoE
1/g1	LOW	ENABLE
1/g2	LOW	ENABLE
1/g3	LOW	ENABLE
1/g4	LOW	ENABLE
1/g5	LOW	ENABLE
1/g6	LOW	ENABLE
1/g7	LOW	ENABLE
1/g8	LOW	ENABLE
1/g9	LOW	ENABLE
1/g10	LOW	ENABLE
1/g11	LOW	ENABLE
1/g12	LOW	ENABLE

Action-> Quit Edit Save

ArrowKey/TAB/BACK=Move SPACE=Toggle ENTER=Select ESC=Back

### To open this screen:

1. From the *Switch Main Menu*, press **3. Port Configuration**.
2. From the *Port Status Menu*, press **2. Poe Settings**.

#### To configure the PoE settings:

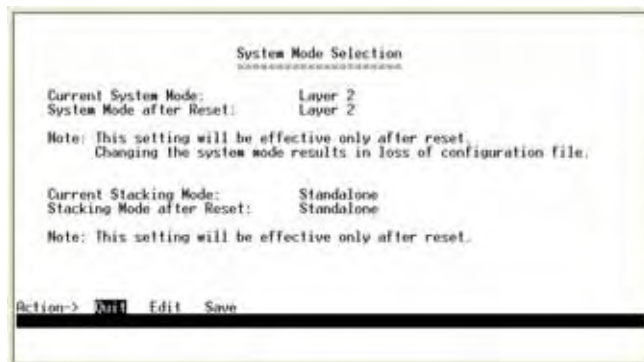
1. Select **Edit**.
2. Proceed as needed:
  - a. Press the **down** arrow key to scroll down through the list of ports.
  - b. Press the **right arrow** key to move the cursor from one field to the next within a row.
  - c. To change a setting, move the cursor to the field, and then press the **Space Bar** until the desired setting appears.

Field	Settings
Priority	Low, High, or Critical
Enable	Enable or Disable

3. Press the **Esc** key to move the cursor to the *Action* list.
4. Select **Save** to save your settings
5. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.

## System Mode (Layer 2 / Layer 3) Selection

You can use the *System Mode Selection* screen to specify whether the Ethernet switch is operating in Layer 2 or Layer 3 mode. You can also configure stacking mode from this screen.



#### To open this screen:

From the *Switch Main Menu*, press **4. System Mode**.

### To edit the system mode or stacking mode:

1. Select **Edit**.
2. Proceed as needed:
  - a. Press the **down** arrow key to scroll down through the list of ports.
  - b. Press the **Tab** key to move the cursor from one field to the next.
  - c. To change a setting, move the cursor to the field, and then press the **Space Bar** until the desired setting appears.

Field	Settings
System Mode after Reset	Layer 2 or Layer 3
Stacking Mode after Reset	Stack or Standalone

3. Press the **Esc** key to move the cursor to the *Action* list.
4. Select **Save** to save your settings
5. When the *Operation complete* message appears, press the **Esc** key to move the cursor to the *Action* list.
6. Reboot the Ethernet switch. Your new settings will take effect after reboot.

## Help

You can use the *Help* screen to view information about the console menus and options.



### To open this screen:

From the *Switch Main Menu*, press **5. Help**.

## Logout

The Logout command lets you logout from the Ethernet switch.

**NOTE:** When you issue this command, you are immediately logged off the Ethernet switch.

# Web Utility Configuration

This chapter provides an introduction to the features of the web-based configuration utility.

Linksys switch provides a complete web-based utility to configure the switch. This utility is accessed through your web browser.

- ["Connecting to the Switch with the Web-Based Utility," on page 51](#)
- ["Using Menus in the Web-Based Utility," on page 51](#)
- ["Viewing On-line Help," on page 52](#)

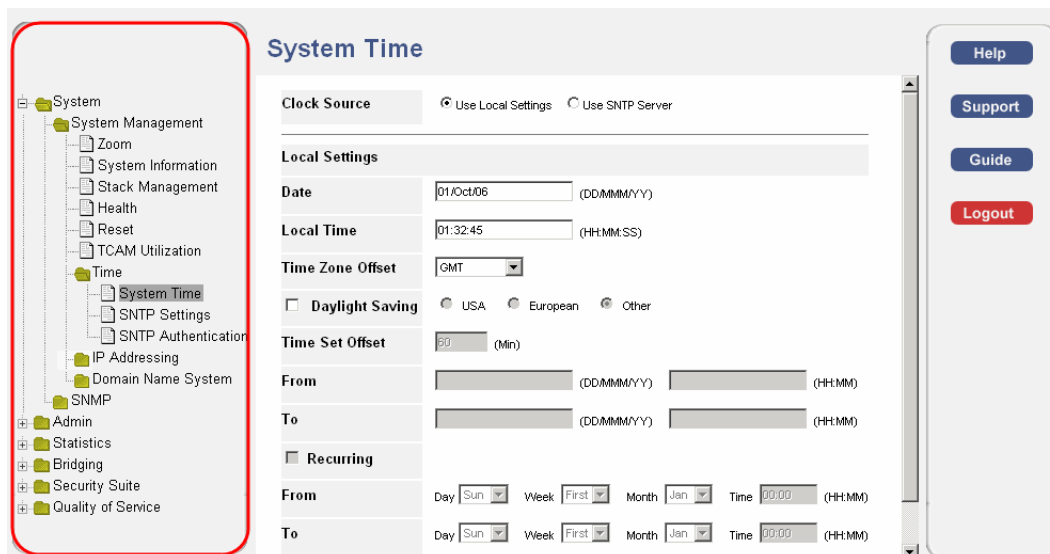
## Connecting to the Switch with the Web-Based Utility

You can connect to the switch using a standard web browser on a computer that is connected to the same network as the switch.

To access the web-based utility, enter the IP address of the switch to the address field of your web browser. The default IP address is 192.168.1.254.

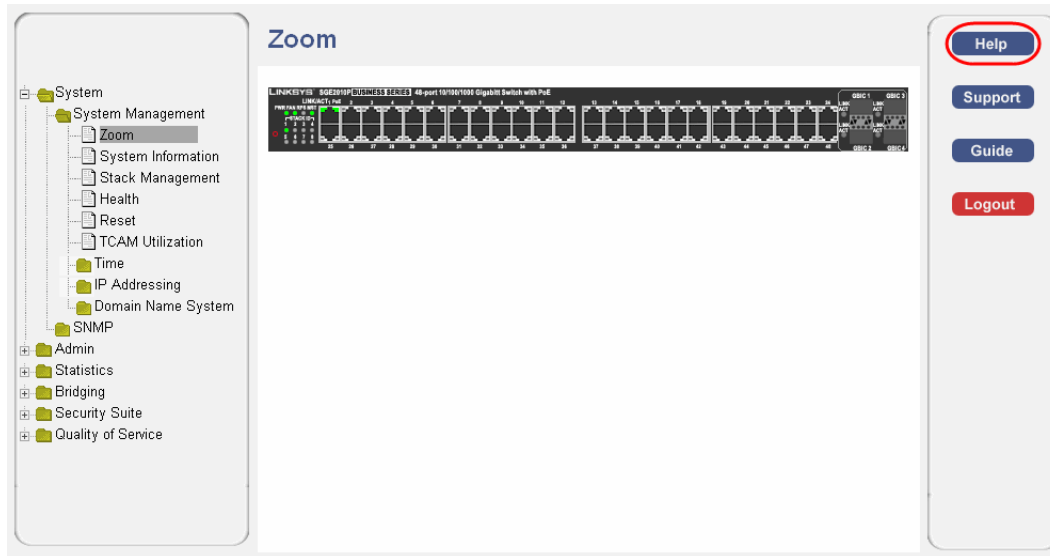
## Using Menus in the Web-Based Utility

Use the left navigation panel to choose options in the web-based utility.



## Viewing On-line Help

The Web Utility has on-line Help including field definitions for each screen. To access the on-line help for a particular screen, click the **Help** button on the right side of the screen.



# Contacts

For additional information or troubleshooting help, refer to the User Guide on the CD-ROM. Additional support is also available by phone or online.

## US/Canada Contacts

- 24-Hour Technical Support: 800-326-7114
- RMA (Return Merchandise Authorization): <http://www.linksys.com/warranty>
- Website: <http://www.linksys.com>
- FTP Site: <ftp://ftp.linksys.com>
- Support: <http://www.linksys.com/support>
- Sales Information: 800-546-5797 (800-LINKSYS)

## EU Contacts

- Website: <http://www.linksys.com/international>
- Product Registration: <http://www.linksys.com/registration>



# Customer Site Survey

Use this Customer Site Survey to gather customer contact information and other information about the customer site that will be needed for the implementation and installation of the Linksys Solution.

<b>Site Business Address</b>	
Business Name	
Street Address	
City	
State	
Zip Code	
<b>Shipping Address</b> (if different from above)	
Street Address	
City	
State	
Zip Code	
<b>Site Contact</b>	
Contact Name	
Title	
Phone	
Mobile	
Fax	
Pager #	
E-mail	
After Hours Contact Phone Number	
Is this Site owned and maintained by the customer?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If this site is not customer-owned, who is the owner and maintainer of the site?	
Is this a manned site?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Specify the hours of operation (for example, Monday through Friday, 8am to 5pm, Saturday 9 am to 12 Noon).	

How many users are at your site?	
Phone number and location of the telephone nearest to the Linksys equipment	
<b>Access Procedures</b>	
Specify room access procedures (for example, must visiting personnel be escorted by customer personnel?).	
<b>Security/Safety Procedures</b>	
Specify any special security/safety procedures, such as the need for safety glasses, safety shoes, and the location(s) of hardhat areas.	
<b>Site Coordinator</b>	
Specify the name and phone number of the site coordinator responsible for ensuring that the site is adequately prepared for the installation of the Cisco equipment.	
Name:	
Phone:	
<b>Network/Bandwidth</b>	
What is the downlink and uplink speed of your broadband connection?	
Uplink speed (must be greater than 768 Kbps):	
Downlink speed (must be greater than 768 Kbps):	
Does your network use a firewall?	<input type="checkbox"/> Yes <input type="checkbox"/> No

# Warranty Information

## Limited Warranty

Linksys warrants this Linksys hardware product against defects in materials and workmanship under normal use for the Warranty Period, which begins on the date of purchase by the original end-user purchaser and lasts for the period specified for this product at [www.linksys.com/warranty](http://www.linksys.com/warranty). The internet URL address and the web pages referred to herein may be updated by Linksys from time to time; the version in effect at the date of purchase shall apply.

This limited warranty is non-transferable and extends only to the original end-user purchaser. Your exclusive remedy and Linksys's entire liability under this limited warranty will be for Linksys, at its option, to (a) repair the product with new or refurbished parts, (b) replace the product with a reasonably available equivalent new or refurbished Linksys product, or (c) refund the purchase price of the product less any rebates. Any repaired or replacement products will be warranted for the remainder of the original Warranty Period or thirty (30) days, whichever is longer. All products and parts that are replaced become the property of Linksys.

## Exclusions and Limitations

This limited warranty does not apply if: (a) the product assembly seal has been removed or damaged, (b) the product has been altered or modified, except by Linksys, (c) the product damage was caused by use with non-Linksys products, (d) the product has not been installed, operated, repaired, or maintained in accordance with instructions supplied by Linksys, (e) the product has been subjected to abnormal physical or electrical stress, misuse, negligence, or accident, (f) the serial number on the Product has been altered, defaced, or removed, or (g) the product is supplied or licensed for beta, evaluation, testing or demonstration purposes for which Linksys does not charge a purchase price or license fee.

ALL SOFTWARE PROVIDED BY LINKSYS WITH THE PRODUCT, WHETHER FACTORY LOADED ON THE PRODUCT OR CONTAINED ON MEDIA ACCOMPANYING THE PRODUCT, IS PROVIDED **AS IS** WITHOUT WARRANTY OF ANY KIND. Without limiting the foregoing, Linksys does not warrant that the operation of the product or software will be uninterrupted or error free. Also, due to the continual development of new techniques for intruding upon and attacking networks, Linksys does not warrant that the product, software or any equipment, system or network on which the product or software is used will be free of vulnerability to intrusion or attack. The product may include or be bundled with third party software or service offerings. This limited warranty shall not apply to such third party software or service offerings. This limited warranty does not guarantee any continued availability of a third party's service for which this product's use or operation may require.

TO THE EXTENT NOT PROHIBITED BY LAW, ALL IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THE WARRANTY PERIOD. ALL OTHER EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF NON-INFRINGEMENT, ARE DISCLAIMED. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This limited warranty gives you specific legal rights, and you may also have other rights which vary by jurisdiction.

TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL LINKSYS BE LIABLE FOR ANY LOST DATA, REVENUE OR PROFIT, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, REGARDLESS OF THE THEORY OF LIABILITY (INCLUDING NEGLIGENCE), ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE THE PRODUCT (INCLUDING ANY SOFTWARE), EVEN IF LINKSYS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL LINKSYS' LIABILITY EXCEED THE AMOUNT PAID BY YOU FOR THE PRODUCT. The foregoing limitations will apply even if any warranty or remedy provided under this limited warranty fails of its essential purpose. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

## Obtaining Warranty Service

If you have a question about your product or experience a problem with it, please go to [www.linksys.com/support](http://www.linksys.com/support) where you will find a variety of online support tools and information to assist you with your product. If the product proves defective during the Warranty Period, contact the Value Added Reseller (VAR) from whom you purchased the product or Linksys Technical Support for instructions on how to obtain warranty service. The telephone number for Linksys Technical Support in your area can be found in the product User Guide and at [www.linksys.com](http://www.linksys.com). Have your product serial number and proof of purchase on hand when calling. A DATED PROOF OF ORIGINAL PURCHASE IS REQUIRED TO PROCESS WARRANTY CLAIMS. If you are requested to return your product, you will be given a Return Materials Authorization (RMA) number. You are responsible for properly packaging and shipping your product to Linksys at your cost and risk. You must include the RMA number and a copy of your dated proof of original purchase when returning your product. Products received without a RMA number and dated proof of original purchase will be rejected. Do not include any other items with the product you are returning to Linksys. Defective product covered by this limited warranty will be repaired or replaced and returned to you without charge. Customers outside of the United States of America and Canada are responsible for all shipping and handling charges, custom duties, VAT and other associated taxes and charges. Repairs or replacements not covered under this limited warranty will be subject to charge at Linksys' then-current rates.

## Technical Support

This limited warranty is neither a service nor a support contract. Information about Linksys' current technical support offerings and policies (including any fees for support services) can be found at: [www.linksys.com/support](http://www.linksys.com/support). This limited warranty is governed by the laws of the jurisdiction in which the Product was purchased by you. Please direct all inquiries to: Linksys, P.O. Box 18558, Irvine, CA 92623

# Federal Communication Commission Interference Statement

This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



**WARNING:** You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

## Industry Canada Statement

The Class [A] digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation. Cet appareil numérique de la class [A] respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

## EC Declaration of Conformity (Europe)

In compliance with the EMC Directive 89/336/EEC, Low Voltage Directive 73/23/EEC, and Amendment Directive 93/68/EEC, this product meets the requirements of the following standards:

- EN55022 Emission
- EN55024 Immunity

# Specifications

Model	<ul style="list-style-type: none"> <li>• SGE2010 48-port 10/100/1000 Ethernet Switch</li> <li>• SGE2010P 48-port 10/100/1000 Ethernet Switch with PoE               <ul style="list-style-type: none"> <li>• IEEE 802.3af PoE on delivered over any of the 48 10/100 ports</li> <li>• Power budget allows for max power of 15.4W to an Ethernet port, with 360W available to all ports on regular AC, and 280W available on redundant power supply</li> </ul> </li> </ul>
Ports	48 RJ-45 connectors for 10BASE-T/100BASE-TX/1000Base-T with 4 Gigabit combo ports shared between mini-GBIC ports Console port Auto MDI/MDI-X Autonegotiate/Manual setting RPS port for connecting to Redundant Power Supply unit
Cabling Type	UTP CAT 5 or better for 10BASE-T/100BASE-TX, UTP CAT 5e or better for 1000BASE-T
Switching Capacity	96 Gig non-blocking
Forwarding Capacity	71.4M packets per second (64-byte packets)
LEDs	Power, Fan, Link/Act, PoE, Speed, RPS, Master, Stack ID 1 - 8
Stack Operation	<ul style="list-style-type: none"> <li>• Up to 192 ports in a stack</li> <li>• Hot Insertion and removal</li> <li>• Ring and Chain stacking options</li> <li>• Master and Backup master for resilient stack control</li> <li>• Auto-numbering or manual configuration of units in stack</li> </ul>
Buttons	Reset Button
Layer 2 options	8K 256 active VLANs (4096 range) Port-based and 802.1Q Tag-based VLANs Protocol-based VLAN Management VLAN Multicast TV VLAN Private VLAN Edge (PVE) GVRP Head of line blocking prevention
Layer 3 options	Static Routing CIDR (Classless Interdomain Routing) 60 Static Routes IPv4 and IPv6 Forwarding in silicon - Wirespeed forwarding of layer 3 traffic

Environment	<p>Operating Temp: Operating Temp. 0°C to 40°C (32°F to 104°F)</p> <p>Storage Temp: Storage Temp. -20°C to 70°C</p> <p>Operating Humidity: Operating Humidity 10% to 90% relative humidity, Non-Condensing</p> <p>Storage Humidity: Storage Humidity 10% to 95% relative humidity, Non-Condensing</p>
Web User Interface	Built-in Web UI for easy browser-based configuration (HTTP/HTTPS)
SNMP	SNMP version 1, 2c, 3 with support for traps
SNMP MIBs	<p>SNMP version 1, 2c, 3 with support for traps</p> <p>RFC1213 MIB-2, RFC2863 Interface MIB, RFC2665 Ether-like MIB, RFC1493 Bridge MIB, RFC2674 Extended Bridge MIB (P-bridge, Q-bridge), RFC2819 RMON MIB (groups 1,2,3,9 only), RFC2737 Entity MIB, RFC 2618 RADIUS Client MIB RFC 1215 Traps</p>
RMON	Embedded Remote Monitoring (RMON) software agent supports four RMON groups (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis.
Firmware Upgrade	<p>Web Browser upgrade (HTTP) and TFTP</p> <p>Dual images for resilient firmware upgrades</p>
Port Mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe
Other Management	<p>Traceroute</p> <p>Single IP Management</p> <p>Secure Socket Layer (SSL) security for Web UI</p> <p>Secure Shell (SSH)</p> <p>RADIUS</p> <p>Port Mirroring</p> <p>TFTP upgrade</p> <p>DHCP Client</p> <p>BootP</p> <p>SNTP</p> <p>Xmodem upgrade</p> <p>Cable Diagnostics</p> <p>PING</p> <p>Syslog</p> <p>Telnet Client (SSH secure support)</p>
IEEE 802.1x	<p>802.1x - RADIUS Authentication. MD5 Hash</p> <p>Guest VLAN</p> <p>Single/Multiple Host mode</p>

Access Control	ACLs - Drop or Rate Limit based on: Source and Destination MAC-based Source and Destination IP address Protocol Port VLAN DSCP/IP Precedence TCP/UDP Source and Destination ports 802.1p priority Ethernet Type ICMP packets IGMP packets DHCP Snooping ARP Inspection IP Source Address Guard Up to 1018 rules
Link Aggregation	Link Aggregation using IEEE 802.3ad LACP Up to 8 ports in up to 8 groups
Storm Control	Broadcast, Multicast and Unknown Unicast
DOS prevention	DOS Attack prevention
Spanning Tree	IEEE 802.1D Spanning Tree, IEEE 802.1w Rapid Spanning Tree, IEEE 802.1s Multiple Spanning Tree, Fast Linkover
IGMP Snooping	IGMP (v1/v2) snooping limits bandwidth-intensive video traffic to only the requestors. Support 256 multicast groups.
Power Redundancy	Connection to RPSU for power redundancy
QoS	Priority levels: 4 Hardware queues Scheduling: Priority Queuing and Weighted Round Robin (WRR) Class of Service: <ul style="list-style-type: none"> <li>• Port-based</li> <li>• 802.1p VLAN priority based</li> <li>• IPv4/v6 IP Precedence/TOS/DSCP based</li> <li>• Diffserv</li> <li>• Classification and Remarking ACLs</li> </ul> Rate Limiting: <ul style="list-style-type: none"> <li>• Ingress policer</li> <li>• Egress rate control</li> <li>• Per VLAN</li> </ul> Statistics: 16 meters
Standards	802.3 10BASE-T Ethernet, 802.3u 100BASE-TX Fast Ethernet, 802.3ab 1000BASE-T Gigabit Ethernet, 802.3z Gigabit Ethernet, 802.3x Flow Control, 802.3ad LACP, 802.1d STP, 802.1Q/p VLAN, 802.1w Rapid STP, 802.1s Multiple STP, 802.1x Port Access Authentication
Certifications	UL (UL 60950), CSA (CSA 22.2), CE mark, FCC Part 15 (CFR 47) Class A
Regulatory Compliance	Products with the CE Marking indicate compliance with the 89/336/EEC and 73/23/EEC directives, which include the safety and EMC standards listed below.



Safety	<ul style="list-style-type: none"> <li>UL 60950-1</li> <li>IEC60950-1 CB / TUV/Rh</li> <li>CSA-C22.2 No. 60950</li> <li>EN 60950</li> <li>AS/NZS 60950-1</li> <li>C-Tick</li> </ul>
EMC	<ul style="list-style-type: none"> <li>FCC Part 15 (CFR 47) Class A</li> <li>ICES-003 Class A</li> <li>EN 55022 Class A</li> <li>CISPR22 Class A</li> <li>EN 55024, EN 50082-1, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>Metric: 440 mm (W) x 375 mm (H) x 44 mm (D)</li> <li>English: 17.32 in. (W) x 14.70 in. (H) x 1.73 in. (D)</li> </ul>
Unit Weight	<ul style="list-style-type: none"> <li>SGE2010 — 4.94kg, or 10.89 lbs (174.25 oz.)</li> <li>SGE2010P — 4.94kg, or 10.89 lbs (174.25 oz.)</li> </ul>
Power	<ul style="list-style-type: none"> <li>SGE2010 — 100-240V 47-73Hz, Internal, Universal; Also equipped with external redundant power supply connector for external power supply, -48VDC</li> <li>SGE2010P — 100-240V 47-63Hz, Internal, Universal; Also equipped with external redundant power supply connector for external power supply, -48VDC</li> </ul>

